

R. ren: 1 ATGGTGAGTAAACAAATATTGAAGAACACTGGATTGCAGGAGATCATGTCGTTTAAAGTGAATC 64

R. ren: 65 TGGAAGGTGTAGTAAACAATCATGTGTTTACAATGGAAGGTTGTGGAAAAGGAAATATTT 124

R. ren: 125 TATTCGGAAACCAACTGGTTCAGATTCGTGTCACAAAAGGGGCTCCGCTTCCATTTGCAT 184

R. ren: 185 TTGATATTCTCTCACCAGCTTTCCAATACGGCAACCGTACATTCACGAAATACCCGGAGG 244

R. ren: 245 ATATATCAGACTTTTTTATACAATCATTTCCAGCGGGATTTGTATACGAAAGAACGTTGC 304

R. ren: 305 GTTACGAAGATGGTGACTGGTTGAAATCCGTTCAGATATAAATTTAATCGAGGAGATGT 364

R. ren: 365 TTGTCTACAGAGTGGAATATAAAGGTAGTAACTTCCCGAATGATGGTCCAGTGATGAAGA 424

R. ren: 425 AGACAATCACAGGATTACAACCTTCGTTCGAAGTTGTGTATATGAACGATGGCGTCTTGG 484

R. ren: 485 TTGGCCAAGTCATTCTTGTTTATAGATTAACTCTGGCAAATTTTATTCGTGTCACATGA 544

R. ren: 545 GAACACTGATGAAATCAAAGGTGTAGTGAAGGATTTTCCCGAATACCATTTCATTCAAC 604

R. ren: 605 ATCGTTTGTAGAGAAGACGTATGTGGAAGACGGAGGTTTGTGTGAGCAACACGAGACGGCCA 664

R. ren: 665 TTGCTCAACTGACATCGCTGGGGAAACCACTTGGATCCTTACACGAATGGGTTTAA 720

FIGURE 2. RENILLA RENIFORMIS AMINO ACID SEQUENCE  
(SEQ ID NO:2)

R. reni: 1 MSKQILKNTGLQEIMSFKVNLEGVVNNHVFTMEGCGKGNILFGNQLVQIRVTKGAPLPFA 60

R. reni: 61 FDILSPAFQYGNRTFTKYPEDISDFFIQSFPAQFVYERTLRYEDGGLVEIRSDINLIEQM 120

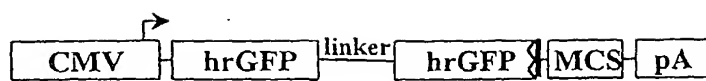
R. reni: 121 FVYRVEYKGSNFPNDGPVMKKTITGLQPSFEVVYMNQDGLVGVQVILVYRLNSGKFYSCHM 181

R. reni: 182 RTLMKSKGVVKDFPEYHFIQHRLEKTYVEDGGFVEQHETAIQLTSLGKPLGSLHEWV 238

FIGURE 3. POLYNUCLEOTIDE AND AMINO ACID SEQUENCES OF A  
HUMANIZED *R. RENIFORMIS* GFP.  
(SEQ ID NOs: 3 and 4, respectively)

1 ATGGTGAGCAAGCAGATCCTGAAGAACACCGCCTGCAGGAGATCATGAGCTTCAAGGTG  
M V S K Q I L K N T G L Q E I M S F K V  
61 AACCTGGAGGGCGTGGTGAACAACCACGTGTTCCACCATGGAGGGCTGCGGCAAGGGCAAC  
N L E G V V N N H V F T M E G C G K G N  
121 ATCCTGTTTCGGCAACCAGCTGGTGCAGATCCGCGTGACCAAGGGCGCCCCCTGCCCTTC  
I L F G N Q L V Q I R V T K G A P L P F  
181 GCCTTCGACATCCTGAGCCCCGCTTCCAGTACGGCAACCGCACCTTCACCAAGTACCCC  
A F D I L S P A F Q Y G N R T F T K Y P  
241 GAGGACATCAGCGACTTCTTCATCCAGAGCTTCCCCGCGGCTTCGTGTACGAGCGCACC  
E D I S D F F I Q S F P A G F V Y E R T  
301 CTGCGCTACGAGGACGGCGGCTGGTGGAGATCCGACGACATCAACCTGATCGAGGAG  
L R Y E D G G L V E I R S D I N L I E E  
361 ATGTTCTGTGTACCGCGTGGAGTACAAGGGCCGCAACTTCCCCAACGACGGCCCCGTGATG  
M F V Y R V E Y K G S N F P N D G P V M  
421 AAGAAGACCATCACCGGCCTGCAGCCCAGCTTCGAGGTGGTGTACATGAACGACGGCGTG  
K K T I T G L Q P S F E V V Y M N D G V  
481 CTGGTGGGCCAGGTGATCCTGGTGTACCGCCTGAACAGCGGCAAGTTCTACAGTGCCAC  
L V G Q V I L V Y R L N S G K F Y S C H  
544 ATGCGCACCTGATGAAGAGCAAGGGCGTGGTGAAGGACTTCCCCGAGTACCACTTCATC  
M R T L M K S K G V V K D F P E Y H F I  
604 CAGCACCGCCTGGAGAAGACCTACGTGGAGGACGGCGGCTTCGTGGAGCAGCACGAGACC  
Q H R L E K T Y V E D G G F V E Q H E T  
664 GCCATCGCCCAGCTGACCAGCCTGGGCAAGCCCCTGGGCAGCCTGCACGAGTGGGTGTAA  
A I A Q L T S L G K P L G S L H E W V -

**Figure 4**



- A. Gly-Gly-Gly-Gly-Ser-Gly-Gly-Gly-Gly-Ser
- B. Gly-Gly-Gly-Gly-Ser-Gly-Gly-Gly-Gly-Ser- Gly-Gly-Gly-Gly-Ser
- C. Gly-Gly-Gly-Gly-Ser-Gly-Gly-Gly-Gly-Ser-Gly-Gly-Gly-Gly-Ser-Gly-Gly-Gly-Gly-Ser



- FIGURE 5